

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION TO THE EXISTING EMERGENCY TRAFFIC SIGNAL TO A FULL TRAFFIC SIGNAL. AT MD 170 AND MATHISON WAY IN ANNE ARUNDEL COUNTY, MD 170 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

I. NORMAL OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA (4) FOUR-PHASE FULLY-TRAFFIC-ACTUATED MODE WITH SOUTHBOUND AND NORTHBOUND MD 170 APPROACHES OPERATING CONCURRENTLY. THE SIDE STREET APPROACH WILL BE STAND ALONE. AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE WILL BE PROVIDED FOR SOUTHBOUND MD 170 . EMERGENCY PRE EMPTION WILL BE PROVIDED FOR MATHISON WAY.

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #5 ARE AS FOLLOWS:

MR. PAUL D. ARMSTRONG
DISTRICT ENGINEER
PHONE: (410) 841-1001

MR. LARRY ELLIOTT
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841-1003

MR. JOHN MAYS
UTILITY ENGINEER
PHONE: (410) 841-1005

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

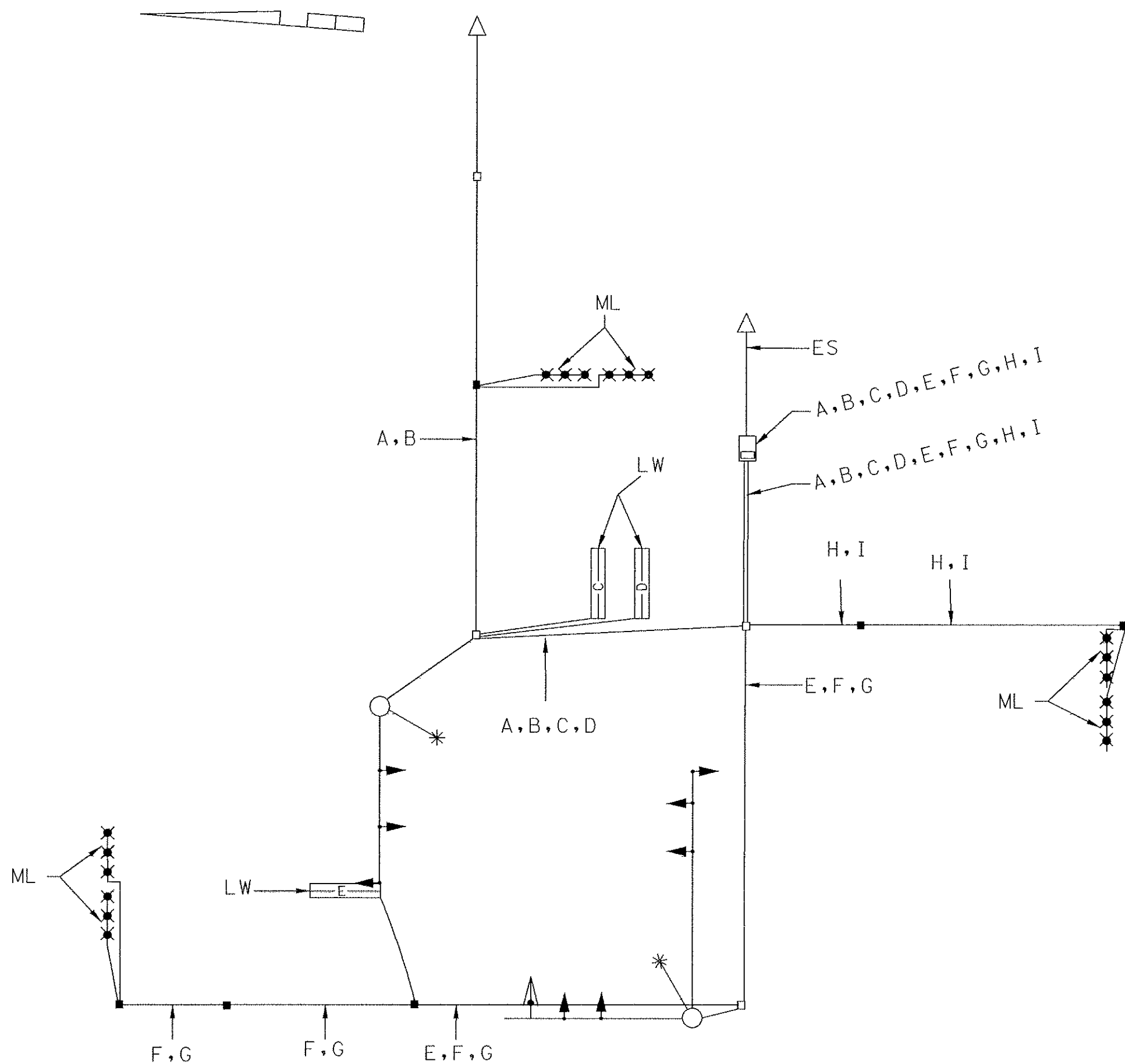
ITEM NUMBER	QUANTITY	DESCRIPTION
9002	3 EACH	FOUR CHANNEL LOOP DETECTOR AMPLIFIERS (DELAY OUTPUT)
9089	68 S.F.	SHEET ALUMINUM SIGNS <ul style="list-style-type: none">- 1 EACH R10-12 SIGN (36 IN. x 42 IN.) - "LANE USE CONTROL - LEFT TURN YIELD ON GREEN BALL" MAST ARM MOUNT- 2 EACH W3-3 SIGN (48 IN. x 48 IN.) "NEW PANEL" WITH FLAGS (30 IN. x 30 IN.) - "WARNING - SIGNAL AHEAD" & "NEW WITH FLAGS" GROUND MOUNT- 1 EACH W3-3 SIGN (36 IN. x 36 IN.) "NEW PANEL" WITH FLAGS (24 IN. x 24 IN.) - "WARNING - SIGNAL AHEAD" & "NEW WITH FLAGS" GROUND MOUNT

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

SPEC. SECTION	CATAGORY CODE NO.	QUANTITY	DESCRIPTION
101	120500	L.S.	MAINTENANCE OF TRAFFIC
—	500000	40 L.F.	FURNISH INSTALL 24" WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
—	585450	40 L.F.	REMOVE EXISTING PAVEMENT MARKINGS - ANY WIDTH
801	801106	115 L.F.	FURNISH AND INSTALL 4" X 6" WOOD SUPPORTS
805	805011	100 L.F.	FURNISH AND INSTALL 1 INCH ELECTRICAL CONDUIT GALVANIZED SLEEVE
805	800000	900 L.F.	FURNISH AND INSTALL 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805	800000	60 L.F.	FURNISH AND INSTALL 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
806	800000	25 EACH	FURNISH AND INSTALL 12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION MAST ARM MOUNT
806	800000	3 EACH	FURNISH AND INSTALL 8 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION MAST ARM MOUNT
810	800000	2 EACH	FURNISH AND INSTALL MICROLOOP PROBE SET WITH 500 FOOT LEAD-IN
810	800000	4 EACH	FURNISH AND INSTALL MICROLOOP PROBE SET WITH 1000 FOOT LEAD-IN
810	862101	2265 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO.14 AWG)
810	861104	550 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
811	811001	6 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813	813014	57.5 S.F.	INSTALL GROUND MOUNTED SIGN
813	800000	10.5 S.F.	INSTALL OVERHEAD SIGN
815	862102	1395 L.F.	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
—	800000	L.S.	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
—	800000	450 L.F.	PULL BACK EXISTING INTERCONNECT CABLE AND REROUTE

WIRING DIAGRAM



PHASE CHART

	1	2	3	4	5	6	7	8	
	(R)	(R)	(R)	(Y)	(Y)	(R)	(R)	(R)	
	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	
	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	
PHASE 2+5	R	R	R	G	G	G	R	R	→
2+5 CHANGE	R	R	R	G	G	G	R	R	→
PHASE 2+6	G	G	G	G	G	G	R	R	→
2+6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	→
PHASE 4	R	R	R	R	R	R	G	G	↓
4 CHANGE	R	R	R	R	R	R	Y	Y	↓
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	↕
PRE-EMPTION I	R	R	R	R	R	R	G	G	↓
PRE-EMPTION I CHANGE	R	R	R	R	R	R	Y	Y	↓

WIRING KEY

C,D,E	} 2-CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)	LW - LOOP WIRE (NO.14 A.W.G.)
		ES - EXISTING SERVICE (UNDERGROUND)
A,B,F,G,H,I	} MICRO LOOP SET	ML - MICRO LOOP SET



CONSULTING ENGINEERS
COLUMBIA, MARYLAND

REVISIONS	APPROVALS
	TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION
	ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR, TRAFFIC & SAFETY
(A) ICB TO FULL COLORS	
6/00 MAA No.	
DA	



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
MD 170 @ MATHISON WAY

DRAWN BY: R. COCCHINI	F.A.P. NO. N/A	TS NO. TS-3557A	SHEET NO. 2 OF 2
CHECKED BY: D. PETERS	S.H.A. NO. N/A	T.I.M.S. NO. E000	
SCALE: NONE	COUNTY: ANNE ARUNDEL		
DATE: 6/1/98	LOG MILE: 02017006.15		